‘THE POLICE HAVE GIVEN UP’: AN EMPIRICAL EXAMINATION OF COVICTIMS’ BELIEFS ABOUT COLD CASE HOMICIDE INVESTIGATIONS [A]

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Abstract

While the experiences of homicide covictims are studied with some frequency, relatively little is known about the forms and determinates of secondary victimization among cold case homicide covictims. This work examines the widespread perception by cold case homicide covictims that police have given up trying to solve their loved one's murder by drawing upon a symbolic interactionism perspective. Specifically, a random sample (n = 65) of cold case homicide covictims is studied to determine if, and how, different forms of communication may be important in their perceptions that the police are no longer investigating the murder. Ordered logistic regression analyses indicate that perceived importance of the information communicated, frequency of police contact, and satisfaction with communication efforts by police decrease covictims' perceptions that police have given up on the investigation. These inverse correlations persist despite statistical controls and have important implications for the bereavement of covictims and for crime rates.

Introduction

Family and friends of homicide victims are often devastated by the murder of their loved one and as a consequence suffer from significant mental and physical health problems (Amick-McMullan, Kilpatrick, & Resnick, 1991; Amick-McMullan, Kilpatrick, Veronen, & Smith, 1989; Armour, 2003; Asaro, 2001; Bucholz, 2002; Goodrum, 2013; Hertz, Prothrow-Stith, & Chery, 2005; Parkes, 1993; Thompson, Norris, & Ruback, 1998; Tuck, Baliko, Schubert, & Anderson, 2012). That anguish is often intensified when interacting with the criminal justice system (Armour, 2003; Casey, 2011; Goodrum, 2007; Karmen, 2007; Rock, 1998; Stretesky, Shelley, Hogan & Unnithan, 2010). Thus, the loved ones of a homicide victim are sometimes labelled as 'covictims.'[1] This research focuses on a particular subset of homicide covictims that often describe themselves as forgotten because their cases are deemed cold. Cold cases are those homicides that are investigated but remain unresolved (Pettem, 2012; Walton, 2006: 2).[2,3] Specifically we are interested in the experiences of cold case homicide covictims and their perceptions that the police have given up on the murder investigation. Very few studies examine the experiences of cold case covictims (except see Stretesky et al., 2010; Wellman, 2013) despite the fact that they are likely to suffer from complicated grief due to the lack of information about the death (Dannemiller, 2002).

Cold case covictims rely heavily on communication with the criminal justice agencies for

[1] It is important to note that there is a debate as to whether "survivor" or "covictim" is a better term to use to describe a family member or friend of a homicide victim. Many individuals who suffer the murder of a loved one report feelings consistent with being victimized and many prefer the term "covictim." Individuals who propose the label "survivor" often argue that they do not like the term "covictim" because they want to keep the focus on the real victims—their loved ones who have been murdered. We adopt the definition used by Hertz et al. (2005: 289) who define homicide covictims as "the surviving family, friends, and loved ones" of homicide victims.

[2] According to the Colorado Victims Right Act (§ 24-4.1-302), a "cold case" is "a felony crime reported to law enforcement that has remained unsolved for over one year after the crime was initially reported to law enforcement and for which the applicable statute of limitations has not expired."

[3] We adopt the term "unresolved" as opposed to "unsolved" homicide in this research because it encompasses a broader range of cold cases. We do so because in some instances the perpetrator is "known" to police. Hence, the case is technically "solved." However, in some instances the perpetrator has not been—or could not be—charged. Thus, the case remains unresolved.

regular updates on the progress of the murder investigation.[4] However, reports by covictims also suggest they face significant challenges when interacting with police and prosecutors (Armour, 2002; Burgess, 1975; Karmen, 2007; Malone, 2007; Riches & Dawson, 1998; Stretesky et al., 2010). Casey (2011: 33) found that homicide covictims often view contact with criminal justice actors as the "most difficult thing to cope with . . . second only to the effect on their health"[5] (see also Gekoski, Adler, & Gray, 2013). Cold case covictims also report they are unsatisfied with the system (see Davis, Lurigio, & Herman, 2007) and sometimes even suggest that law enforcement has given up the murder investigation (Stretesky et al., 2010). Notably, attempts to improve satisfaction by simply providing covictims with any information may not be helpful. Goodrum (2007: 729) observes that "[t]he notion that criminal justice workers can stave off victims' disappointment by giving them information on standard procedures may be naïve." Some researchers therefore advise that it may be desirable for some covictims to decrease their interactions with the criminal justice system (Kenney, 2004). [6] Minimizing contact with the criminal justice system does not necessarily generalize to cold case homicide covictims. We find that particular covictims are unique in that they may experience some feelings of victimization precisely because their contact with the system is minimized over time (Stretesky et al., 2010).

The present study is grounded in symbolic interactionism and the secondary victimization experiences of cold case covictims to help identify those factors that contribute to feelings that the police have given up investigating the cold case homicide. To understand why covictims might

[4] In the state of Colorado the Victim's Rights Act states that "law enforcement shall provide the victim in a cold case information concerning any change in the status of the case. In addition, upon the written request of the victim, the law enforcement agency shall provide an update at least annually to the victim concerning the status of a cold case involving one or more crimes for which the criminal statute of limitations is longer than three years" (§ 24-4.1-303).

[5] Indeed, Kenney (2004) reports that victims who have contact with the criminal justice system are not able to cope with their experiences as well as those victims who are able to minimize their contact with the system.

[6] Law enforcement personnel often report that they believe sharing information harms covictims emotionally by failing to provide them with meaningful information or because the details are too emotionally distressing. That is, police may perceive that they have an obligation to protect covictims from information and therefore minimize their contact with the system in order to be helpful.

believe that police have given up, it is critical to discern how covictims come to see themselves as victims because of their interactions with the system. Our results lead us to advocate for changes in the way information is communicated to covictims to aid in bereavement, encourage system legitimacy, and lower homicide rates.

Toward a Theory of Secondary Victimization among Cold Case Covictims

As the field of victimology has expanded there has been a call to view victims and their experiences from a symbolic interactionism perceptive (Holstein and Miller, 1990; Konradi, 1996; Konradi, 1997). Symbolic interactionism suggests that self-interpretations are determined by the meaning people assign to interactions with others (Blumer, 1969; Goffman, 1967; Mead, 1934). Moreover, the development of self is constantly changing as people engage with those around them. In the study of victims, the symbolic interactionism perspective emphasizes that victimization is constructed so that people come to see themselves as victims. Holstein and Miller (1990) describe this process as the "dramatization of injury and innocence." However, individuals do not necessarily have to view themselves as victims (see also Burcar, 2013; Konradi, 1996). Whether or not cold case homicide covictims self-identify as having secondary victimization, they are emotionally invested in the criminal justice process and suggest to us that they read into interactions with law enforcement to glean information about the status of the investigation. As a result, we have found that power and information are ultimately intertwined for cold case covictims (Stretesky et al., 2010).

Importantly, symbolic interactionism takes issues of power into account in the study of victimization (Konradi, 1996; Konradi, 1997; Quinney, 1972; Rock, 1999). Quinney (1972) points out that if we recognize power, "[w]e would begin to conceive of the victims of police force, the victims of war, the victims of the 'correctional' system, the victims of state violence, the victims of oppression of any sort." Issues of power are often central to cold case covictims' construction

of victimization because law enforcement has absolute authority over the homicide investigation and the information investigators discover about the murder. As symbolic interactionism might suggest, these unequal exchanges lead covictims to describe feeling "used," as police have no accountability and "you don't get any feedback, progress or work going towards it" (Covictim, personal communication, 2008). Within this milieu of power, covictims' perceptions of secondary victimization are shaped and determined (see Konradi, 1997). As one covictim noted, "They [the police] will always be able to tell me, 'Well, we just don't know,' and there won't be a thing that I can do about it. I really can't put pressure on these people" (cited in Stretesky et al., 2010: 884).

Holstein and Miller (1990; see also Berrill and Herek, 1990) also suggest that it is important to understand how macro-level processes shape micro-level interactions. For cold case covictims the expanding culture of victims' expectations in general is likely to impact and shape perceptions of victimization. Edwards (2004: 979) best characterizes this changing culture for homicide victims, lamenting that "government language purporting to put victims at the centre of policy and procedure is likely to give victims the impression that they will have a more significant participatory role than they actually are being given." When covictims do not experience these emerging cultural expectations for greater police responsiveness, they are perhaps more likely to perceive themselves as secondary victims. For example, after a meeting with family members a local newspaper gave legitimacy to covictim perceptions by noting that "investigators fielded questions and complaints from family members, many of whom said they have trouble getting information from investigators. Or they feel their cases are being ignored" (Culver, 2006). In cold cases this dramatization is not hard to imagine because murders are often highly visible to the public, and news media and homicide support groups frequently highlight the role of police in solving those murders. Thus, signals about changing cultural norms take place in a very public setting. As a result of both changing culture and publicity, covictims may be more likely to see

themselves as victims of police neglect. One area where this is apparent is in the formation of homicide support groups. As Rock (1998) observes, there is a growing number of such groups to respond to the problems covictims face with respect to the criminal justice system.

When covictims come forward and share their experiences that their cases are not being taken seriously, then secondary victimization becomes more recognizable. From a symbolic interactionism perspective, many cold case covictims "become known and understood" as victims because of their interactions with the system (Holstein and Miller, 1990, see also Konradi, 1996; Rock, 1998). Rock (1998: 194) specifically observes that "[a]lienation will be reanimated at every stage of the natural history of the formal management of a homicide, at the inquest, public appeals for information, reports of arrests, arraignments, trials, acts of sentencing, appeals and parole hearings." In studying homicide covictims, Rock (1998) finds that victimization is related to meaning that covictims gain in their interactions with law enforcement. As one covictim suggests, "We're victimized first by the crime, and then victimized again and again and again afterwards" (cited in Rock, 1998: 194). As a result, it is possible to examine the notion of secondary victimization for cold case covictims by examining their perceptions of police.

Secondary victimization is defined as a feeling on the part of covictims that they have "been subjected to inadequate, insensitive or inappropriate treatment, attitudes, behavior, responses and/or practices by criminal justice and social agencies, which compound their original trauma" (Gekoski et al., 2013: 307). Holstein and Miller (1990: 110) suggest that "the failure to sanction harm-doers and/or provide restitution may be portrayed as a second victimization." This appears to be the case for cold case homicide covictims. Moreover, if Holstein and Miller are correct, this notion that offenders will not be punished has significant implications for secondary

victimization.[7] That is, interactions between covictims and law enforcement may shape perceptions of secondary victimization primarily because covictims perceive that law enforcement does nothing to bring the murderer to justice. Instead, as one homicide covictim argued, cases are "treated like shoplifting, not murder." As we suggest, the threat of secondary victimization has implications for the way in which homicide covictims respond to grief, as the perceived lack of effort by police may intensify grief and extend the grieving process (Stretesky et al., 2010). One covictim (personal communication, 2008) explained that the lack of response by the police who have "not done anything" has made her feel as if she has "lived this for 13 years."

But why do covictims believe that the system has stopped trying to locate the murderer and bring him or her to justice? Previous research on homicide covictims suggests that the perceptions that accompany the lack of interaction with law enforcement, as well as the scarcity of information provided by members of the criminal justice community to covictims, might shape secondary victimization (Goodrum, 2007, 2013; Stretesky et al., 2010). Gekoski et al. (2013: 312) discovered that "police did not provide the family with adequate information about the investigation into the victim's murder, ignoring repeated requests for information and/or only parting with information if they wanted something." Goodrum (2007: 743), who conducted a qualitative study of 32 homicide covictims, prosecutors, and criminal justice workers, also describes interactions between law enforcement and covictims as a "conflict over the flow of information." While law enforcement may have good reasons for limiting information in cases where there may be potential harm to a homicide investigation, Goodrum notes that conflicts may still arise because covictims desire detailed information about the murder and believe that law enforcement should keep the channels of communication open so that they are being constantly informed about the

[7] This is not to say that other forms of secondary victimization don't exist for cold case covictims. Rather, those forms of victimization are, according to the literature, dependent upon the arrest and processing of an offender (Rock, 1998). This is not the case with cold case covictims.

status of the investigation. Importantly, Goodrum (2007: 743) discovered that 18 of the 32 homicide covictims studied felt that they had problems gaining important information from law enforcement, while ten "expressed heartfelt appreciation for the details about the death and the investigation that detectives provided."

Stretesky et al. (2010) also conducted a qualitative study of homicide covictims, but focused on cold case homicides, and reported that covictims say that they need and expect information and communication from law enforcement. Specifically, Stretesky et al. (2010) discovered that 36 of the 37 covictims they interviewed were not satisfied with the level of communication about their cold case. The researchers suggest that covictims' negative attitudes about police communication increased over time—indicating to the covictims that the police had "given up" on the investigation. That is, covictims were "nearly universal in their belief that police stopped actively investigating their case when it turned cold [because covictims] observed that law enforcement failed to provide regular case updates, return phone calls, or notify covictims of personnel changes" (Stretesky et al., 2010: 887). One covictim noted that the lack of communication was emotionally very distressing when he described an event in which he called the police station and was told on the telephone that the detective working the case had retired several months before: "So that part I think is more hurtful than anything else, to feel like, OK, this person has literally taken control of a murder investigation that has impacted our family in more ways than most people can ever comprehend, and then for us to just kind of become a project that goes by the wayside" (cited in Stretesky et al., 2010: 883).

In short, it appears that the lack of communication and information from law enforcement, combined with an imbalance in power between victims and police as well as changing public perceptions about what it means to be a victim in a public setting, brings covictims to believe that the criminal justice system is not responding to the murder of their loved one—that they are being

victimized again by the system. Understanding the circumstances under which cold case covictims come to believe that police are doing nothing about their cases is important if researchers want to have a better understanding of how these victims experience this type of secondary victimization. We therefore focus on the conditions that lead covictims to believe that the police are being unjust in their investigation—that they have "given up" the quest for justice and will fail to punish the murderer. An understanding of the types of interaction that influence these feelings among cold case covictims that they are victims could help reduce secondary victimization and have important indirect benefits for covictims.

Data and Methods

Data for this study come from a survey of cold case covictims of unresolved murders in Colorado.[8] The survey was constructed to examine the experiences covictims have with the criminal justice system. The survey sample was constructed in two steps. First, a nonprofit organization contacted 139 local law enforcement agencies in Colorado and asked them to identify all unresolved homicide and long-time missing persons in their jurisdiction. This investigation produced a list of 1,518 unresolved homicides as of April 2012.[9] Second, study researchers used that list to identify a random sample of 250 unresolved homicides. Information on unresolved homicides was then used to identify covictims (typically the "next of kin") for potential inclusion in the study. Victims' advocates helped locate and contact the 250 covictims to ask them if they would be willing to participate in a survey of their experiences with and perceptions of law enforcement with respect to the handling of their loved one's murder. Only one covictim per homicide was selected.[10] Some covictims could not be contacted because addresses and/or phone

[8] University of Colorado Denver Institutional Review Board approval number 11-0974.

[9] That list is available on the website of Families of Homicide Victims and Missing Persons, Inc. (http://www.unresolvedhomicides.org). The Colorado Bureau of Investigation also maintains a list of cold cases that it initially obtained from Families of Homicide Victims and Missing Persons.

[10] The members of the nonprofit organization helped to locate covictims and were trained by private investigators

numbers could not be found. In addition, some covictims were institutionalized, or had passed away. A total of 161 covictims were located and asked if they would be willing to consider participating in the survey. A total of 119 covictims agreed to participate and a total of 65 surveys (n = 65) were returned, although not all covictims answered all questions. The covictims who did not want to participate in the survey gave various reasons for their refusal, including avoidance of emotional pain and insufficient time to complete the survey.[11]

The sample of covictims in this study is typical of many homicide covictim studies. Parents (mothers or fathers) made up 45% of the covictims in the sample, while siblings (brothers or sisters) made up 27%. The remaining covictims in this study consisted of children, spouses, aunts, cousins, and grandparents. Approximately 70% of all participants were women and 29% had bachelor's degrees. The median income fell in the range of $35,000 to $50,000. Sixty-five percent (65%) of the study participants reported that are non-Hispanic Whites.[12]

Sixty-seven percent (67%) of all cold case homicides were being investigated by urban law enforcement agencies and the dates of the murders ranged from 1970 to 2010, suggesting that all the unresolved murders discussed here would be classified as cold cases according to the state of Colorado.

Outcome Variable

The main outcome variable measures whether covictims believe that law enforcement has given up on the homicide investigation of their loved one. As noted, covictims may view

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for that task. Locating homicide covictims, even relatively recent covictims, is a difficult undertaking. For example, Thompson et al. (1998: 226) report that 58% of the covictims in their study "were not reached due to incorrect telephone numbers, disconnected phones, non-published numbers, numbers not in service for incoming calls, or were unreachable due to having no phone number or no next-of-kin provided in the Medical Examiner's files."

[11] Surveys were confidential and significant effort was made to ensure that covictims could not be identified by their survey responses. Thus, it was not possible to compare the characteristics of those covictims who returned the survey to the characteristics of covictims who did not return the survey.

[12] The United States Census Bureau (2013) estimates that for 2012, 69.9% of Colorado residents were "White, non-Hispanic"; 36.7% had a bachelor's degree; and the state's median household income was $58,244.

themselves as being victimized a second time if they believe police have given up looking for the offender (Holstein and Miller, 1990; Stretesky et al., 2010). We measure the variable *giveup* with a question that asks covictims about the extent to which they agree with the statement, "The police have given up trying to solve my loved one's murder." Responses on this item range from "strongly agree" to "strongly disagree" for the 61 covictims who responded to this question. Of those 61 covictims, 56% state that they strongly agree that police have given up on the investigation, while 16% agree. Twenty percent of the 61 covictims disagree or strongly disagree that police have given up on the investigation. Finally, 8% of all covictims report that they are neutral, and therefore neither agree nor disagree.

Indicator Variables

The major indicator variables focus on communication because the literature suggests it is an important predictor of secondary victimization. We include five indicators of communication. As previously suggested, we hypothesize that more and/or better communication (as measured by those indicators) leads to a decrease in perceptions of secondary victimization that police have given up on the homicide investigation.

We create a variable called *important information* that indicates whether the information police provide to covictims is viewed as important by asking the extent to which covictims agree with the statement, "The police provide me with important information." Of the 55 covictims who answered this question, approximately 70% disagree or strongly disagree with this statement, while 22% agree or strongly agree.

Information delivery is a variable that measures the extent to which covictims agree with the statement that they "are satisfied with the way information has been provided as the case has grown cold." This indicator variable measures the extent to which covictims view the information delivery process as satisfactory. Again, the literature indicates that *how* police tell covictims about

the murder is important, and may subsequently influence perceptions about how covictims feel about the murder investigation.

Third, we determine whether covictims have had *annual contact* with law enforcement, by examining their communication during the previous year. Contacts with law enforcement may occur when law enforcement provides covictims with information about case developments or simply through the annual written letter that is mandated by Colorado Victim Rights Act (§ 24-4.1-303). Approximately 38% of covictims report that they have been contacted by law enforcement during the past year.[13] As research suggests, annual contacts can signal to covictims that the police have not given up on the investigation (Stretesky et al., 2010).

Frequency of contact is created to indicate the number of times that covictims have been contacted by law enforcement since their case went cold (i.e., remained unresolved for over one year). The frequency of contacts ranged from 0 to 30 $\bar{x} = 3.1, s = 6.3$) in the sample.

Face-to-face contact between covictims and police are important in structuring communication and information in meaningful ways. This may impact covictim perceptions of whether police have given up on their investigation. We believe that annual meetings can provide the type of contact that reduces the likelihood that covictims believe that police have given up on their case. Each year the Families of Homicide Victims and Missing Persons, Inc. (http://www.unresolvedhomicides.org/about.php) sponsors an annual meeting in Colorado that brings together cold case experts, victim advocates, law enforcement, and covictims of unresolved homicides. This forum has taken place annually since 2001 and lasts for an entire day, and it represents the only structured effort in the state to facilitate widespread contact between covictims

[13] This statistic should not be interpreted as suggesting that the 62% of covictims who are not contacted by law enforcement represent a failure to adhere to the Colorado Victim's Rights Act. Specifically, some cold cases are not entitled to annual status calls because older cold cases do not fall under the Victim's Rights Act. In addition, some covictims have not asked law enforcement to contact them.

and law enforcement.[14] Moreover, covictims are able to meet with the specific detectives in charge of their loved ones' cases—sometimes for the first time. The annual conference provides an important time and place for the communication of information to covictims.[15] We include a variable that measures the potential impact of this annual conference on views that police have given up on investigations by asking whether covictims have ever attended the conference. The variable *annual conference* is coded as "1" if a covictim reports attending an annual conference and "0" if a covictim states that they have not attended an annual conference. Nearly half of all covictims surveyed (48%) indicate that they have attended at least one annual conference between the years 2001 and 2011.

Control Variables

In addition to indicators of satisfaction and communication, we consider several other important variables that may also be correlated with perceptions that police have given up investigating cold case homicides. We include a measure that examines whether covictims believe that the police blame the victim for their murder (*police blame victim*) by asking whether they agree with the statement that the "police blame my loved one for his or her murder." We hypothesize that if covictims suspect that the police blame the victim, they are also likely to believe that the police will give up on the investigation. Of the 51 covictims who responded to this question, 57% strongly disagree or disagree with the statement, while 32% agree or strongly agree. The remaining respondents neither agree nor disagree.

[14] Detailed conference information is available at http://www.unresolvedhomicides.org/about.php. The annual meeting not only provides information about homicide investigations and cold case covictims' rights (e.g., the role of crime labs, coroner death investigations, the Colorado Victim's Rights Act, NamUS, the development of a cold case task force), but also includes space for face-to-face meetings with detectives in charge of covictim cold cases. Each year the number of individuals who attend the conference ranges in the hundreds—with perhaps thousands of different covictims and law enforcement personnel attending since 2001.

[15] Guest speakers, for example, have included Susan Herman, Renny Cushing, Jan Miller, Vito Spano, and others victims' rights and cold case experts.

Time may also be an important factor in covictims' perceptions that police have given up on a case. As time passes, covictims may be more likely to see that police have given up on the investigation. We measure time since the murder by estimating *years since murder*. The average murder in the sample occurred 18.5 years ago (s = 10.4).

Finally, we examine the correlation between covictim demographics and perceptions that police have given up on the investigation. As noted in previous research by Stretesky et al. (2010), this may be especially important in terms of race, ethnicity, and income because socially disadvantaged groups are more likely to believe that the police do not see their loved one's murder as important enough to warrant investigative resources. Therefore, we include indicators for non-Hispanic Whites, annual household income, level of education, and sex. Descriptive statistics for all variables analyzed are presented in Appendix A.

Analyses

We begin our examination of perceptions that law enforcement has given up on murder investigations by focusing on bivariate correlations. Specifically, we estimate the relationships between *giveup* and the six indicators of information and communication. Because the dependent variable is ordinal, we estimate these relationships using Somers' D, a measure that is appropriate for estimating ordinal correlations that takes on a proportional reduction of error (PRE) interpretation (Agresti and Finlay, 1997; Somers, 1962). Results of correlations in the sample are presented in Table 1, with 95% confidence intervals (see Newson, 2006) that suggest a potential range of likely values of the parameter.[16]

All correlation coefficients are negative, which suggests that for this sample of covictims, perceptions of more and/or better communication are likely to be paired with perceptions by

[16] The "Kendall's tau-a, Somers' D and percentile slopes" package for Stata was created by Roger Newson (2006) at the Imperial College of London (UK) and can be obtained from http://www.imperial.ac.uk/nhli/r.newson/stata.htm or from the Statistical Software Components on the Stata Corporation website (http://www.stata.com/support/ssc-installation/).

covictims that the police have not given up on the investigation. The corresponding confidence intervals reported in Table 1 reveal that four of the six relationships in the sample are likely to be replicated in the population (i.e., for the indicator variables *important information*, *information delivery*, *frequency of contact*, and *annual conference*). Specifically, in the case of *important information* covictims who are more likely to report that they believe police provide them with important information are also less likely to believe that police have given up on the investigation. Within the population we are 95% confident that there are between 45% and 83% fewer errors predicting *giveup* when *important information* is considered (as opposed to predicting that compared orderings are always discordant). We see similar estimates of population parameters for *information delivery* (i.e., a reduction of error on the order of 37% to 75%), *frequency of contact* (i.e., a reduction of error on the order of 19% to 66%), and *annual conference* (i.e., a reduction of error on the order of 18% to 55%).

[Table 1 About Here]

Covictims who reported that they were simply contacted during the previous year, (*annual contact*), without regard to the importance of information or victim satisfaction, are not significantly more or less likely to say that they believe police have given up on the investigation. This result is apparent as the population estimates take on both negative and positive values (e.g., –0.37 to 0.05). Thus, for the population of covictims in Colorado it may be the case that there is no correlation between these two variables.[17]

Together, bivariate correlations suggest that the communication of information between covictim and law enforcement is important. That is, if covictims believe that police provide them with important information, and if they are satisfied with their communication, they are

[17] The lack of an association may indicate that covictims who do not receive contact have found another way to grieve besides getting involved or educated.

significantly less likely to believe that police have given up on the investigation. One mechanism for this type of information and communication is the annual conferences that allow covictims to talk in person with law enforcement and become educated about the criminal justice system and its methods for cold case investigations.[18]

To examine whether these potential relationships hold up when other indicators are considered, we use ordered logit regression (OLR). OLR estimates the probability of being in one category of the dependent variable versus all higher categories of that variable (Long and Freese, 2006). Given that the sample size limits the number of independent variables that can be examined simultaneously, we estimate coefficients (in this case odds ratios) in four separate models in Table 2. Model 1 estimates the effects of the communication variables simultaneously; Model 2 estimates the effects of perceptions of police blame and time since murder; and Model 3 estimates the effect of demographics. In Table 2, Model 4, we estimate the impact of the statistically significant variables from Model 1, Model 2, and Model 3 to determine if relationships change when they are examined simultaneously. Table 2 reports 95% confidence intervals around estimated odds ratios where a ratio of 1 signifies that no association exists. Those odds ratios below 1 indicate that the odds decrease as the independent variable increases, while odds ratios above 1 indicate that the odds increase as the independent variable increases. Table 2 also includes those more traditional hypotheses test statistics (i.e., "p" values denoted by a "*") that test whether the null hypothesis of no relationship in the population can be rejected ($\alpha = 0.05$, two-tailed).

[Table 2 About Here]

[18] It is certainly possible that when covictims attend more than one annual conference that communication will increase. That is, successful communication in the past may promote additional successful communication. The cold case survey did not measure the number of meetings attended. We recommend that in the future, similar research should measure the number of conferences or meetings.

We assess multicollinearity as a potential problem in our models in two ways. First, in Table 2 we include average variance inflation factors (VIFs), which are the mean of the VIF scores of each variable in any particular model (Camminatiello and Lucadamo, 2008). VIFs are estimated in linear regression to assess the potential for multicollinearity among the independent variables in each model. We adopt the "rule of 4" (O'Brien, 2007) for any one variable in these analyses and suggest that scores that exceed 4 need to be considered as potential sources of multicollinearity when producing logit estimates. We also assess multicollinearity by removing the most highly correlated independent variables in each model to determine if estimated coefficients change significantly (results available from authors upon request). Both VIF scores (Table 2) and the removal of the most correlated independent variables indicate little to no problem with multicollinearity in this analysis. In fact, no single variable VIF score exceeded 2.00 in any of the models and model coefficients and standard errors changed little when variables were added and removed from the models, except as noted below, where we have strong theoretical reason to believe that a potential mediating effect may be occurring in the case of the variable *annual conference*.

One important assumption of OLR is that the distance between categories is proportional (Brant, 1990; Long and Freese, 2006). That is, the logit model estimates suggest there are parallel lines). Non-violation of this assumption ensures that the coefficients are likely to be equivalent across category comparisons in the population. To check this assumption we use Brant's test (see Williams, 2006).[19] All Brant results indicate that no statistical differences exist between categories and therefore that the proportionality assumption is not violated. However, as an alternative to

[19] Long and Freese developed the "Brant" command for parallel regression assumptions. This package can be installed in Stata from the Statistical Software Components on the Stata Corporation website (http://www.stata.com/support/ssc-installation/).

OLR, we also estimate generalized ordered logit models as developed by Williams (2006).[20] Those results, while somewhat varied, were substantially similar to OLR results confirming the Brant test (results and data available upon request). We present the OLR results, as they are relatively parsimonious in presentation and interpretation.[21]

The results in Table 2 are similar to those presented in Table 1 (bivariate), with one important exception. The variable *annual conference* is no longer statistically significant in Model 1, when other measures of communication are controlled, and results suggest that attending the annual conference does not increase or decrease the odds that covictims believe that the police have given up on their investigation. We will return to this relationship shortly. First, we note that Table 2 suggests covictims are less likely to believe that police have given up on the investigation when they are provided with what they perceive to be important information (OR = 0.39; $p < 0.05$). That is, when other variables are held constant, a one-unit increase in perceptions about important information (e.g., for the variable *important information*, moving from agree to strongly agree) produces an expected decrease in the log odds of .39 of being in a higher category of *giveup* (e.g., strongly disagree vs. disagree, neutral, agree, and strongly agree). We find nearly identical results for the variable *information delivery* (OR = .44; $p < 0.05$). The number of contacts also appears important; each additional contact between police and covictims decreases the odds that covictims believe police have given up by a factor of 0.86. Finally, Model 2 in Table 2 suggests that when covictims think that police blame the murder victim they are more likely to report that the police have given up on the investigation (OR = 2.49; $p < 0.05$). These relationships are

[20] The gologit2 package fits generalized ordered logit models. Williams (2006: 59) notes that "the actual values taken on by the dependent variable are irrelevant except that larger values are assumed to correspond to 'higher' outcomes." The gologit2 package can be installed in Stata from the Statistical Software Components on the Stata Corporation website (http://www.stata.com/support/ssc-installation/).

[21] Results are also similar when ordinary least squares regression is used, as well as when the outcome indicator is dichotomized into "agree" and "disagree" and ordinary logistic regression is used. In short, all possible alternative methods of analysis appear to produce substantively similar findings.

generally replicated in Model 4, with one important exception: the variable *police blame victim* is no longer statistically significant, indicating that the correlation between blame and the perception of giving up may be an artifact of communication of important information. That is, a lack of information may be the reason that covictims believe police blame the homicide victims for their own death. None of the demographic variables are statistically significant, and time since murder does not appear to be important.

As noted, *annual conference*, while statistically significant in the bivariate analysis (Table 1), is no longer significantly related to perceptions that law enforcement has given up on its investigation in multivariate analysis (Table 2, $p \geq 0.05$). The inclusion of additional communication variables into the analysis with *annual conference* attenuates its odds ratio and increases its standard error, thereby eliminating the statistical significance of the variable in Model 1 (Table 2). To investigate why this coefficient changes when other communication variables are simultaneously examined, we look to see if a mediating effect might be occurring. That is, the annual conference might provide an important opportunity that increases the number of meaningful contacts and intensifies feelings of consequential communication on the part of covictims. This, in turn, decreases perceptions that police have given up on the investigation. We diagram this potential (and post hoc) relationship in Figure 1.

[Figure 1 About Here]

Next, we empirically examine the correlation between the annual conference and perceptions of communication in Table 3. According to Table 3, the variable *annual conference* does increase the odds of the frequency of contact between covictims and law enforcement ($OR = 5.04$, $p < 0.05$). This result is natural in that covictims are likely to come into contact with the employees from the law enforcement agencies engaged in the investigation of their loved one's murder at the conference—thereby increasing the overall number of contacts. As a result, these covictims appear

to be less likely to believe that police have given up on the investigation into their loved one's murder.

However, results for *annual conference* regarding the perceptions of the importance of information, and covictims' satisfaction with it, are left open to additional investigation. Specifically, these results provide marginal support that a correlation exists between conference attendance and indicators of communication (i.e., *important information* and *information delivery*). Thus, the potential relationships diagramed in Figure 1 cannot be rejected outright. That is, both variables are statistically significant ($p < 0.10$, two-tailed), and in the direction predicted, when 90% confidence intervals—rather than 95% confidence intervals—are considered.[22] The analysis in Table 3 suggests that we can be 90% confident that for *information importance*, the odds associated with attending the conference could be as small as 1.17 or as large as 6.01 in the population. Moreover, for the variable *information delivery*, the odds are likely to range between 1.05 and 6.08 in the population (CI = 90%). Both results support the position that there is likely a positive correlation between these variables in the population. That is, the annual conference increases covictims' perceptions of satisfactory communication by police as well as perceptions that the police have imparted important information to them.

[Table 3 About Here]

Conclusions

Rock (1998) suggests that researchers must examine ways to attenuate or eliminate the feeling on the part of covictims that "nothing is being done" by the criminal justice system.[23] This

[22] Given that our hypothesis is directional, it would not be incorrect to consider one-tailed significance tests as opposed to the two-tailed tests that are reported here. In that case, the relationships diagramed in Figure 1 would be statistically significant at $p < 0.05$.

[23] Hertz et al. (2005) estimate that there are approximately 16.4 million homicide covictims in the United States. Armour and Umbrett (2007) suggest that the Virginia Mason Medical Center estimates that there are between 120,000 and 240,000 additional homicide covictims annually. Morrall, Hazelton, & Shackleton (2013) suggest that many homicides remain unresolved.

research answers that call and suggests that covictims who have less important, less satisfying, and less frequent communication with law enforcement are also more likely to believe that the police are no longer investigating the murder of their loved one. Importantly, we find that focusing on the *method* of communication to alleviate secondary victimization is essential in the case of cold case homicide covictims. There are four important reasons why our finding of an association between communication and secondary victimization needs to be considered.

First, annual mail updates, while well-intentioned and mandated in some victims' rights legislation, do not appear to be an effective mechanism for helping reduce perceptions that police have given up on a murder investigation (Casey, 2011; Geberth, 1992). Instead, our results lead us to recommend that when police can provide information, through annual meetings, it may help aid bereavement. For this reason alone, we argue, there should be changes to victims' rights legislation to mandate meetings that bring law enforcement, criminal justice experts, and covictims together to discuss cases. Annual conferences appear to increase communication and therefore can reduce secondary victimization and aid bereavement. In short, the structure of communication promotes the types of interactions that mitigate the form of secondary victimization wherein covictims believe the police are doing nothing about the crime.

Second, by reducing perceptions that police have given up on an investigation it may be possible to prevent cold case covictims from feeling that they must conduct their own investigation. Stretesky et al. (2010) discovered that covictims who report that they believe that police are not doing any investigating are also more likely to conduct their own investigation, possibly placing themselves and others in danger, or perhaps compromising an investigation. As one covictim recently noted, "Let me tell you right now, I went out on my own and interviewed people I thought I wanted to talk to" (cited in Stretesky et al., 2010: 886). Police who want to stop

these self-investigations can do so, perhaps, by utilizing better communication techniques identified in this research.

Third, the association between communication and secondary victimization has implications for murder rates. Riedel (1999: 299) stresses that "[w]ithout . . . the availability of individuals who can provide information relative to the victim, the offender, or the incident, police investigators are severely constrained in their efforts." Cold case researchers suggest that changes in previous personal relationships (e.g., some witnesses may be more likely to come forward over time) are one of the major reasons that cold cases are solved (Litwin, 2004; Walton, 2006; Wellford et al., 1999). Importantly, covictims may often gain information that could change the status of a case from passive to active. If covictims believe that law enforcement has given up, it is more likely that important information will be evaluated out of context or will not be shared with the police (Carter, 1985). This lack of communication could lead to a reduction in homicide clearance rates if some homicide offenders will reoffend. Thus, employing better communication may be important for increasing homicide clearance rates and reducing homicide.

Finally, as we have suggested, Holstein and Miller (1990) note that some individuals may see themselves as victims because the criminal justice system is viewed as unable or unwilling to hold the offender accountable. Perceptions of secondary victimization may undermine the legitimacy of the criminal justice system. This can increase the overall crime rate (Roberts and Hough, 2005; see also Sherman, 2002). As Lafree (1998) observes, if a significant portion of the population comes to believe that the police are not effective, it can have consequences for the legitimacy of the criminal justice system, which may potentially leave the door open for a future increase in crime. Utilizing better forms of communication to reduce perceptions that police have given up, then, seems especially important.

Despite the unique nature of this study, we do advise caution. Our research is only generalizable to cold case homicide covictims, and not to all covictims or to all homicide covictims. Moreover, our findings of a conference effect may only apply to Colorado. That is, all conferences are not the same. In Colorado cold case conferences are organized by non-profit organizations, not the police, which may impact covictims' perceptions about police responsiveness. While this study is based on data obtained from a random sample of covictims, not all covictims could be located and some refused to participate. Covictims who refused to participate may be more traumatized by the homicide investigation and could be more likely to believe that law enforcement has given up on the investigation, but Amick-McMullan et al. (1989) suggest, it is likely that the most distressed covictims are also the most dissatisfied with the criminal justice system. As a result, it is probably not unreasonable to conclude that non-respondents have less contact with police and are more likely to believe that police have given up. Finally, it may be that those covictims who believe they have a good relationship with law enforcement are more likely to take part in annual meetings precisely because of their positive perceptions.

A final limitation of the study is that the sample size is limited (n = 65) and, in several instances, information is missing on key variables. As a result, weak to marginal effects—while perhaps important substantively—are not statistically significant, possibly leading us to discount some variables that are important in determining whether covictims believe that police have given up on their investigation.

Despite these limitations, this study is the first of its kind to examine the experiences of homicide covictims. As a result, we propose that this research provides an important first step in understanding more about cold case covictims in a quantitative sense in order to understand their experiences with police. Nevertheless, many important questions remain. As cold case homicide

covictims continue to advocate for their rights, we hope that research in this area will help to ask and answer those questions.

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TABLE 1. Correlation between Indicators of Communication and Covictims' Beliefs that Law Enforcement Has Given Up

Communication Indicator	Somers' D Coefficient (95% CI)	n
Important Information	–0.63 (–0.83, –0.45)*	53
Information Delivery	–0.56 (–0.75, –0.37)*	57
Annual Contact	–0.16 (–0.37, 0.05)	58
Frequency of Contact	–0.42 (–0.66, –0.19)*	60
Annual Conference	–0.36 (–0.55, –0.18)*	58

* $p < 0.05$; two-tailed test against a null hypothesis for a correlation of "0."

TABLE 2. Ordered Logit Regressions Results for Covictims' Beliefs That Police Have Given Up on the Homicide Investigation

	Model 1 Communication Odds Ratio (95% Conf. Interval)	Model 2 Controls Odds Ratio (95% Conf. Interval)	Model 3 Controls Odds Ratio (95% Conf. Interval)	Model 4 Communication & Controls------- Odds Ratio (95% Conf. Interval)
Communication				
Important Information	0.39 (0.18 to 0.85)*	----------	----------	0.38 (0.16 to 0.90)*
Information Delivery	0.44 (0.21 to 0.91)*	----------	----------	0.38 (0.18 to 0.82)*
Annual Contact (1 = yes)	0.46 (0.11 to 2.03)	----------	----------	----------
Frequency of Contact	0.86 (0.76 to 0.98)*	----------	----------	0.84 (0.73 to 0.96)*
Annual Conference	0.34 (0.07 to 1.73)	----------	----------	----------
Controls				
Police Blame Victim	----------	2.49 (1.46 to 4.25)*	----------	1.82 (0.90 to 3.69)
Years Since Murder	----------	1.01 (0.95 to 1.07)	----------	----------
Demographic Controls				
White (1 = White)	----------	----------	2.43 (0.80 to 7.36)	----------
Income	----------	----------	0.93 (0.66 to 1.34)	----------
Education	----------	----------	1.11 (0.72 to 1.68)	----------
Sex (1 = Female)	----------	----------	0.55 (0.16 to 1.95)	----------
Intercepts				
1	-11.03	-0.05	-2.33	-9.90
2	-7.92	0.91	-1.29	-6.14
3	-6.43	1.23	-0.84	-4.63
4	-4.67	2.24	-0.90	-2.67
n	49	47	51	43
Average ($\bar{x}$) VIF Scores	1.65	1.07	1.03	1.68
-2 Log Likelihood	-38.50	-50.65	-62.43	-29.39
Pseudo R^2	0.38	0.12	0.03	0.46

* $p < 0.05$; two-tailed test against a null hypothesis for an odds ratio of "1."

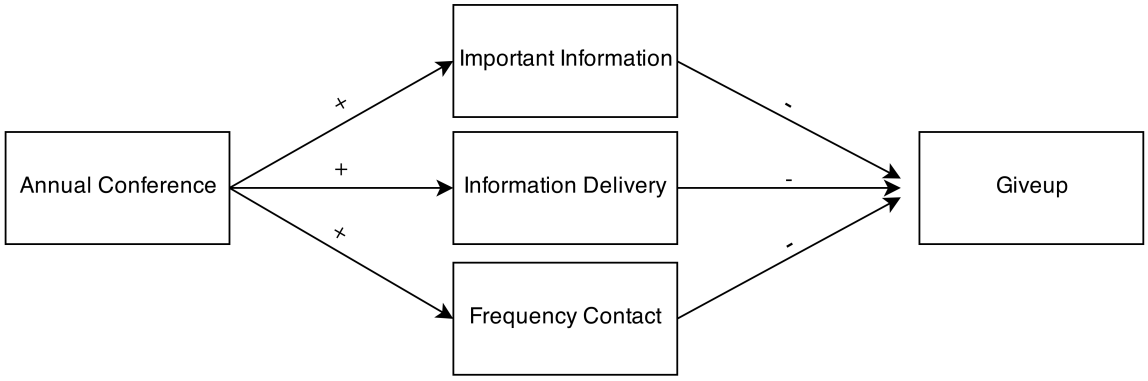
TABLE 3. Ordered Logit Regressions Results for Covictims' Beliefs That Police Have Given Up on Investigation [a]

	Important Information	Information Delivery	Frequency of Contact
	Odds Ratio	Odds Ratio	Odds Ratio
	(95% Conf. Interval)	(95% Conf. Interval)	(95% Conf. Interval)
Annual Conference	2.60	2.53	5.04
	(0.96 to 7.05)	(0.89 to 7.19)	(1.74 to 14.69)*
n	55	58	60
-2 Log Likelihood	-72.67	-64.02	-92.56
Pseudo R^2	0.03	0.02	0.05

** $p < 0.05$, two-tailed; * $p < 0.10$, two-tailed

[a] Model intercepts are not reported, but are available upon request.

FIGURE 1. Diagram of Hypothesized Mediating Relationship



APPENDIX A. Demographic Characteristics of Cold Case Covictims

Variable	Attribute	Frequency (Percentage)
Giveup	Strongly Disagree	5(8%)
	Disagree	7 (12%)
	Neutral	5(8%)
	Agree	10(16%)
	Strongly Agree	34(56%)
Important Information	Strongly Disagree	21(38%)
	Disagree	18(33%)
	Neutral	4(7%)
	Agree	10(18%)
	Strongly Agree	2(4%)
Information Delivery	Strongly Disagree	37(61%)
	Disagree	13(22%)
	Neutral	3(5%)
	Agree	4(7%)
	Strongly Agree	3(5%)
Annual Contact	Yes	28(38%)
	No	39(61%)
Annual Conference	Yes	29(48%)
	No	23(52%)
Police Blame Victim	Strongly Disagree	16(31%)
	Disagree	13(25%)
	Neutral	6(12%)
	Agree	10(20%)
	Strongly Agree	6(12%)
White	Yes	46(71%)
	No	19(29%)
Income	< $10k	4(7%)
	$10,000–20,000	3(5%)
	$20,001–35,000	7(13%)
	$35,001–50,000	11(20%)
	$50,001–70,000	17(31%)
	> $70k	13(24%)
Education	Some HS	5(8%)
	HS Diploma or GED	12(20%)
	Some College	35(41%)
	College Degree	9(15%)
	Some Graduate Work	2(3%)
	Graduate or Prof. Degree	8(13%)
Sex	Female	45(70%)
	Male	19(30%)
Years Since Murder	Mean (n = 61)	18.8
	Standard Deviation	10.5
Frequency of Contact	Mean (n = 63)	03.1
	Standard Deviation	06.3
Total number of cases	65	